

Amendment Date: June 21, 2006

Reply to Office Action of February 27, 2006

Page 2

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-5 (Cancelled).

6. (New) A receiver for receiving and efficiently separating a composite 3-G wireless communications signal into constituent baseband components, wherein said receiver combines multiple processing tasks of a 3-G receiver into a single filter, the single filter comprising,

an equal ripple linear phase recursive filter channelizer performing simultaneous spectral translation and bandwidth reduction of multiple channels,

an equal-ripple linear phase recursive filter interpolator for performing sample rate changes,

whereby the equal ripple linear phase recursive filter channelizer performs the processing tasks required to operate multiple channels, including spectral translation, bandwidth reduction, sample rate changes, and outputs a separate time series for each channel in the composite 3-G wireless communications signal.